

Work Order ID 61186

August 11, 2010 7:43:09 AM



Page 1

Item ID: D350-636-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube LH

Start Date: 8/11/10 Start Qty: 1.00



Cust Item ID:

Required Date: 8/20/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: CL Date: 10/8/11 Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D2750	Rev F
-------	-------

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-011 CHG 005

S 10/08/30

HJ for BG 10-8-30

B61186

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00



Skidtubes

0.00

Skidtubes

Skidtubes

Memo

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill fwd step holes using DT9616. Ensure proper positioning.

6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)
ONLY DRILL ONE SIDE OF FWD SADDLE HOLES USING DT8150

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE

8- Clecko DT9642 and drill fwd saddle holes on second side, ensure proper positioning.

9- Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail C to 0.500" (8 holes per side)

10- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to

AWW 10-08-14

DD

10-8-16

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Run Start



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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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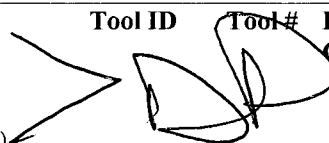
0.297".

11-Open up holes of Detail A to 0.297" (total of 2 holes per side)

12-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R Aluminum Rod batch: ☐ M114877

13-Grind welds flush as per Dwg D2750



10-8-16

BE 10-8-16

BE 10-8-17

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

8/10/08/12

Memo

0.00

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

8/10/08/12

Memo

0.00

80

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

DP

10-8-18

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

BE 10-8-18

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
	Skidtubes								
Skidtubes	Memo 1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750. 2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750. 3- Open float hole to 0.500" (4 per side) 4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750 (welding instructions on sheet 8) 5-Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove alodine as required. 7-Bond web D2739 in place as per QSI 015 A/R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sikaflex-291 batch: <u>1115114</u> exp. date: <u>11-1-30</u> 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Aluminum Rod batch: <u>1114877</u> <u>BB</u> <u>10-8-20</u> 9- At section AJ-AJ drill out x-bolt spacer to 0.404" <u>BB</u> <u>10-8-20</u> 10-Grind welds flush as per Dwg D2750								

10-8-18

10-8-23

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D2750

12-Debur holes

170

QC10- Inspect visual per QSI004- ground welds 0.00



QC

Memo

0.00

8/10/08/24

Quality Control

180

QC5- Inspect part completeness to step on W/O 0.00



QC

Memo

0.00

8/10/08/24

Quality Control

DP 10-8-23

HL

Dart Aerospace Ltd

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 	HandFinishing	0.00				<u>ml</u>	<u>10</u>	<u>08</u>	<u>26</u> (1)
HandFinish	Memo	0.00							
Hand Finishing	1- Install inserts as per Dwg D2750								
230 	HandFinishing	0.00				<u>ml</u>	<u>10</u>	<u>08</u>	<u>26</u> (1)
HandFinish	Memo	0.00							
Hand Finishing	1-Inspect for Foreign Objects								
	2-Spray inside of tube with "LPS-3" batch: <u>N/A</u>								
	3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: <u>115114</u> EXP DATE: <u>11/01</u>								
	4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: <u>114189</u>								
	5-Coat all exposed fasteners with "LPS Procyon" batch: <u>114596</u>								

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

240

QC5- Inspect part completeness to step on W/O

0.00

S 10/08/26



QC

Memo

0.00



Quality Control

250

Pick Kit

0.00



Packaging

Memo

0.00

P 10/11/30 (2)

Packaging

260

QC4- 100% Inspect kits for completeness

0.00

S 10/08/30



QC

Memo

0.00



Quality Control

*****ensure antiseize is on AN8C21A bolts*****

W/O:		WORK ORDER CHANGES					
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Accept

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Stop



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Customer:

Reference:

Run Start



Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

[illegible]

Dart Aerospace Ltd

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Picklist Print

August 11, 2010 7:43:08 AM

Page 1

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Parent Item: D350-636-011

Parent Item Name: Skidtube LH



Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ
 IPP Rev:J 06-03-23 As per Rev D JLM
 IPP Rev:K 06-07-13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC
 IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:EC
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec
 IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010
 DD verified by:EC IPP Rev:P 10.06.22
 revise seq110 DD ver:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2594-3 Manufactured No 230 Each 379.0000 8 8



O-Ring, 205 Skidtube

Location	Loc Qty	Loc Code
FP	379	
55546	19	
58191	12	
59358	348	

ml 10-08-26

D2744 Manufactured No 110 Each 35.0000 1 1



Cap

Location	Loc Qty	Loc Code
LG	35	
59198	35	

BE 10-08-16

D2600-3-BENT Manufactured No 110 Each 16.0000 1 1



Extrusion Bent

Location	Loc Qty	Loc Code
LG	16	
59410	16	

AWM 10-28-16

(1)*

Dart Aerospace Ltd

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Start Qty: 1.00

Required Qty: 1.00

D2743 Manufactured No 160 Each 299.0000 8 8
Crossbolt Spacer

Location	Loc Qty	Loc Code
LG	299	
50281	10	
57953	2	
59111	287	

D2739 Manufactured No 160 Each 0.0000 1 1

350 I Beam

D3490-3



Cross Bolt Spacer

Manufactured No 160 Each 54.0000 4 4

Location	Loc Qty	Loc Code
LG	54	
59229	14	
60294	40	

D3490-1 Manufactured No 160 Each 19.0000 4 4

Cross Bolt Spacer

Location	Loc Qty	Loc Code
LG	19	
59424	19	

ALS4-1032-225 Purchased No 220 Each 5,945.000 38 38

Insert

Location	Loc Qty	Loc Code
PK011	5945	
110768	5945	

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Shop Packet Print

Page 2

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H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

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Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

D3492-041 Manufactured No 230 Each 93.0000 8 8



Plug Assembly

Location	Loc Qty	Loc Code
FP013	93	
59114	24	
59420	69	

MM 10-08-26

D3793-3 Manufactured No 230 Each 13.0000 1 1



Wearshoe

Location	Loc Qty	Loc Code
FP18	12	
59631	12	
FP19	1	
57947	1	

MM 10-08-26

AN8C35A Purchased No 230 Each 53.0000 1 1



BOLT

Location	Loc Qty	Loc Code
FP	1	
110847	1	
ST346	52	
114442	27	
115188	25	

MM 10-08-26

D3793-1 Manufactured No 230 Each 15.0000 1 1



Wearshoe

Location	Loc Qty	Loc Code
FP18	15	
59151	2	
59630	13	

MM 10-08-26

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Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

D3488-041

Manufactured No

230

Each

18.0000

1

1



Blade Fitting Assembly, LH

LocationLoc QtyLoc Code

FP

11

53915

11

FP007

7

56052

7



ml 10-08-26

D3794-3

Manufactured No

230

Each

24.0000

1

1



Gasket

LocationLoc QtyLoc Code

FP10

12

60826

12

FP18

12

56066

11

59153

1



ml 10-08-26

AN6C44A

Purchased No

230

Each

177.0000

4

4



BOLT

LocationLoc QtyLoc Code

FG

2

103964

2

ST344

175

111649

2

114653

1

114784

47

114941

75

115030

50



ml 10-08-26

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Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased No

230

Each

56.0000

1

1



NUT

Location

Loc Qty

Loc Code

ST303

56

113845

7

114934

49

D3536-25

Manufactured No

230

Each

29.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP12

29

58820

5

59625

24

D3631-1

Manufactured No

230

Each

571.0000

8

8



Washer

Location

Loc Qty

Loc Code

ST072

297

60755

297

ST076

274

52693

206

54388

68

D3791-1

Manufactured No

230

Each

20.0000

1

1



Wearplate

Location

Loc Qty

Loc Code

FP17

20

58573

11

59626

9

ml 10-08-26

ml 10-08-26

ml 10-08-26

ml 10-08-26

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Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 6

Work Order ID: 61186

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

AN960C10L NAS1149C0332 Purchased No 230 Each 29.0000 38 38

R



washer

13[#] 115000

Location

Loc Qty

Loc Code

ST245

29

107534

29

D2745

Manufactured No

230

Each

169.0000

8

8



Bushing

Location

Loc Qty

Loc Code

ST023

169

52311

5

59112

164

AN3C5A

Purchased No

230

Each

1,464.000

34

34



Bolt

Location

Loc Qty

Loc Code

ST350

1454

114330

11

115015

743

115108

300

115316

300

115371

100

ST351

10

113121

10

MM 10-08-26

MM 10-08-26

MM 10-08-26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Page 7

Work Order ID: 61186

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Manufactured No

230

Each

55.0000

3

3



Wearpad



MA 10.08.26

Location

Loc Qty

Loc Code

FP

1

55465

1

FP17

54

57713

3

59593

3

60192

48

AN960C816L

Purchased

No

230

Each

21.0000

1

1



WASHER



MA 10.08.26

Location

Loc Qty

Loc Code

ST348

21

110584

18

111424

3

D3492-043

Manufactured

No

230

Each

51.0000

8

8



Plug Assembly



MA 10.08.26

Location

Loc Qty

Loc Code

FP

2

54682

2

FP013

49

59117

1

59190

4

59421

14

60712

30

B# 61207

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 8

Work Order ID: 61186

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

AN3C6A Purchased No 230 Each 425.0000 4 4



BOLT

Location Loc Qty Loc Code

ST351 425

111982 425

NAS1611-013 Purchased No 230 Each 67.0000 8 8



O-RING

Location Loc Qty Loc Code

FP 67

114451 51

114496 16

D3535-25 Manufactured No 230 Each 24.0000 1 1



Wearshoe

Location Loc Qty Loc Code

FP18 24

59623 24

D3794-1 Manufactured No 230 Each 19.0000 1 1



Gasket

Location Loc Qty Loc Code

FP010 19

57942 18

59627 1

mm 10.08.26

mm 10.08.26

mm 10.08.26

mm 10.08.26

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Work Order ID: 61186



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

MS21043-6 Purchased No 230 Each 726.0000 4 4



NUT

Location Loc Qty Loc Code

ST301 726

112314 726

mt 10.08.26

D3493-1

Manufactured No 260 Each 48.0000 2 2



Washer

Location Loc Qty Loc Code

ST065 48

59127 18

60873 30

59127

MS21083C8

Purchased No 260 Each 56.0000 1 2



NUT

Location Loc Qty Loc Code

ST303 56

113845 7

114934 49

mt 10.08.26

AN8C21A

Purchased No 260 Each 57.0000 2 2



BOLT

Location Loc Qty Loc Code

ST345 57

113558 17

114653 40

mt 10.08.26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Work Order ID: 61186

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

AN960C816L *NA0149C08322*
WASHER

Purchased No

260 Each

21.0000

1

2



114915

[Signature]

Location

Loc Qty

Loc Code

ST348

21

110584

18

111424

3

D3672-1

Manufactured No

230 Each

1,011.000

4

4



Phenolic Washer

Location

Loc Qty

Loc Code

ST077

993

51674

5

52505

988

ST117

18

34470

18

D2741

Manufactured No

260 Each

21.0000

1

1



Blade, 350 Skidtube

Location

Loc Qty

Loc Code

ST466

21

55905

1

57949

20

D3532-1

Manufactured No

260 Each

31.0000

2

2



Spacer

Location

Loc Qty

Loc Code

ST068

31

59426

9

60510

22

60510

mt 10-08-26

[Signature]

Q10/30 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

• **NOTE:** Date & initial all entries

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Page 11

Work Order ID: 61186



Parent Item: D350-636-011



Parent Item Name: Skidtube LH

Start Date: 8/11/10

Required Date: 8/20/10

Start Qty: 1.00

Required Qty: 1.00

D3672-13

Purchased

No

260

Each

842.0000

2

2 ✓



Phenolic Washer



Gold/30 (1)

Location

Loc Qty

Loc Code

ST077

842

54363

842

54363

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

4

3

2

1

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1			D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

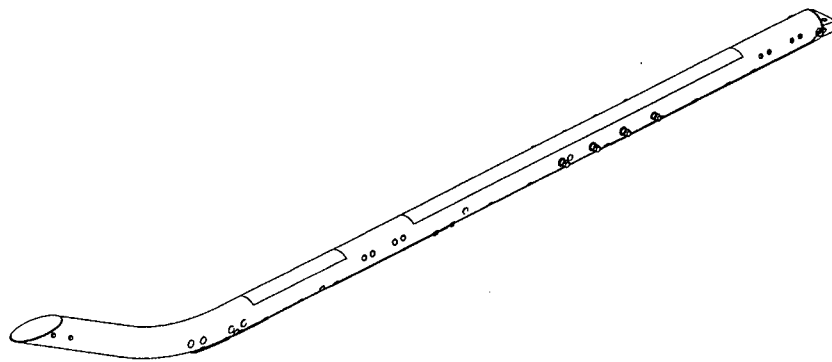
- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 8) WELD PER DART QSI 004
- 9) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- 10) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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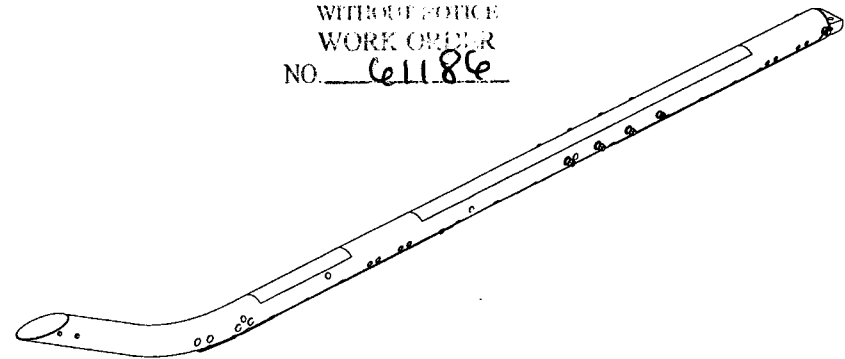
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66186

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.16		
DART AEROSPACE USA, INC. PORT HADLOCK, WA			
DRAWING NO. D2750		REV. F	
TITLE		SHEET 1 OF 1	
350 SKIDTUBE ASSEMBLY		SCALE	
		NTS	
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D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

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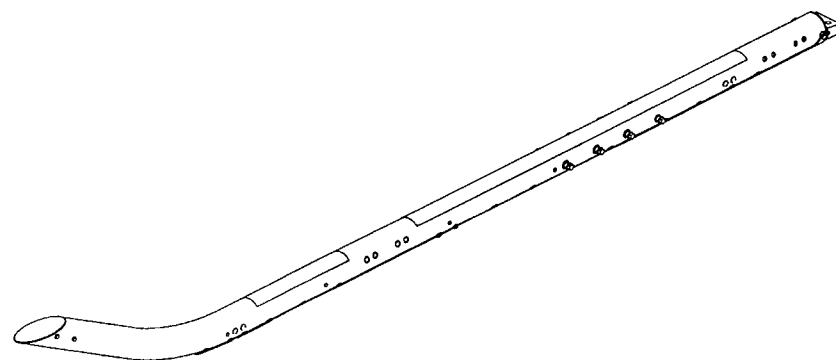
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D2750-043 350 SKIDTUBE ASSEMBLY, LH

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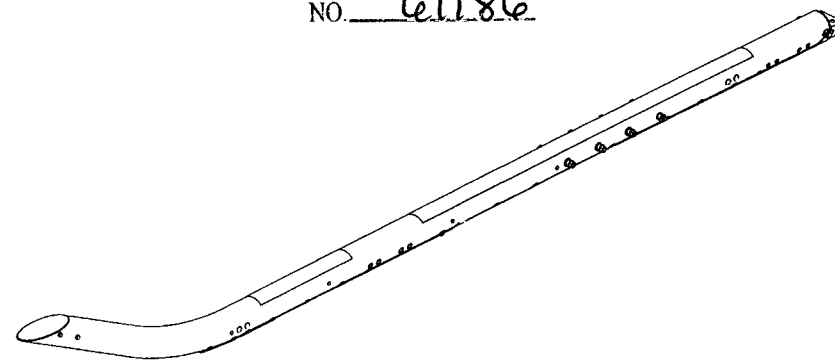
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D2750-044 350 SKIDTUBE ASSEMBLY, RH

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DE APPR.	NA	350 SKIDTUBE ASSEMBLY	NTS
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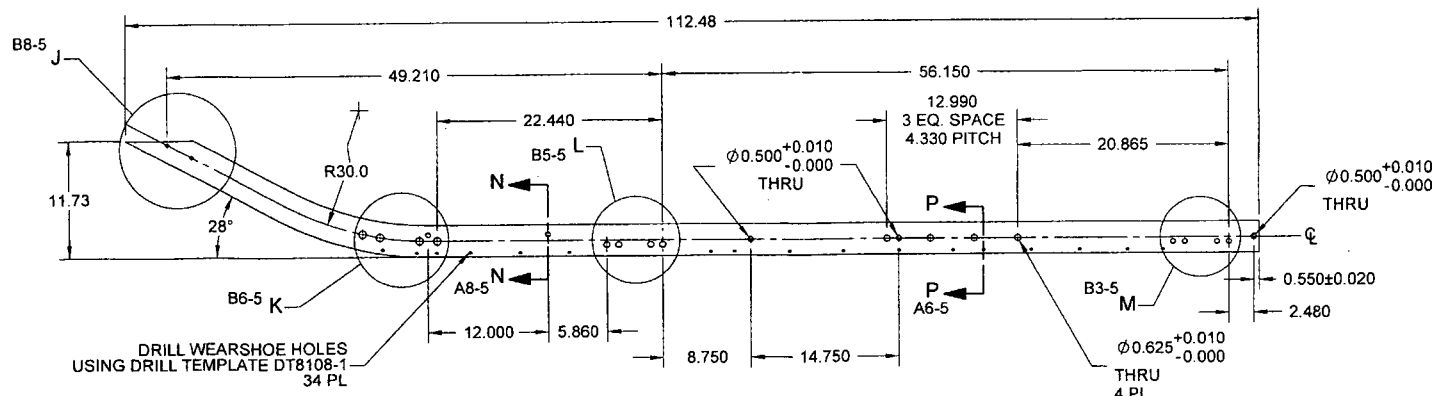
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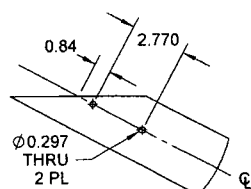
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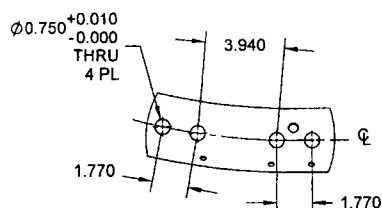


D2750-2 RH SKIDTUBE

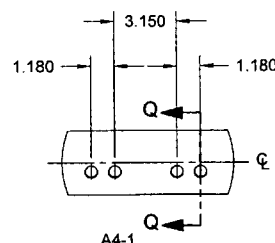
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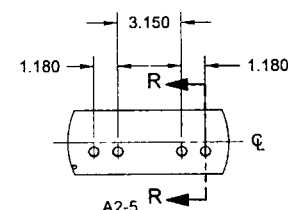
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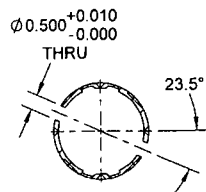
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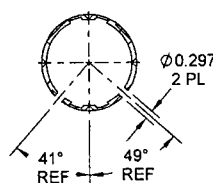
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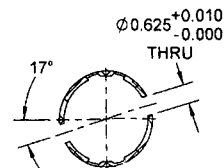
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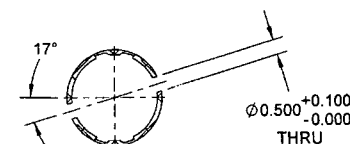
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SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 5 OF 11
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DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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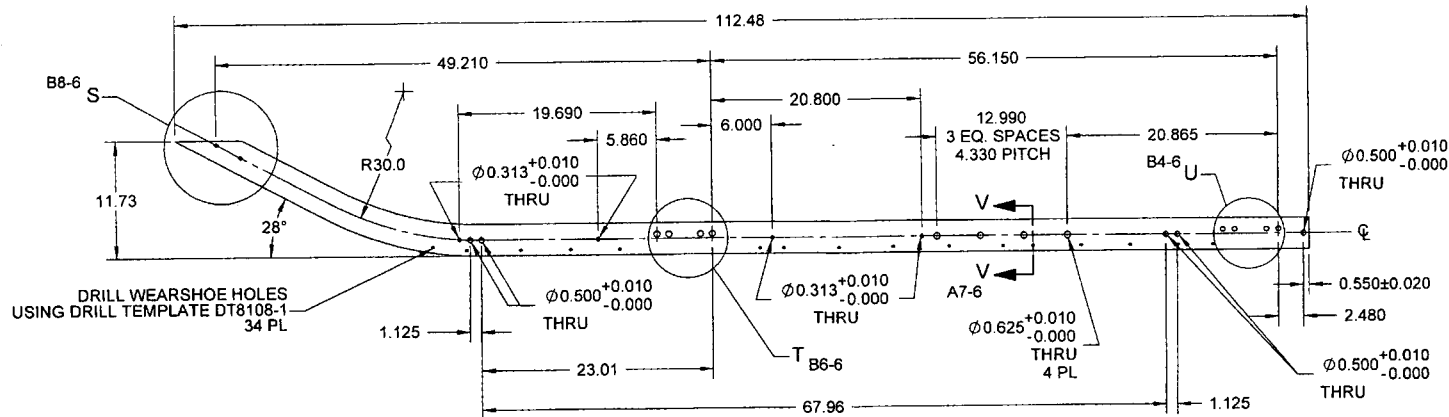
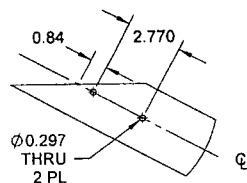
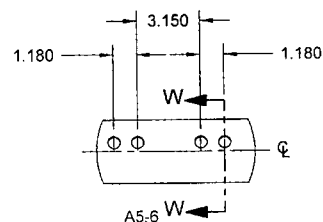
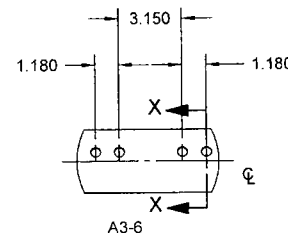
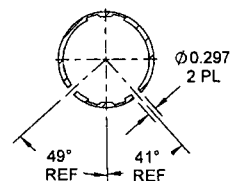
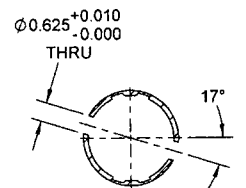
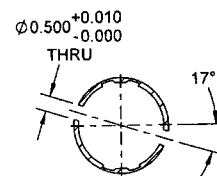
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4

3

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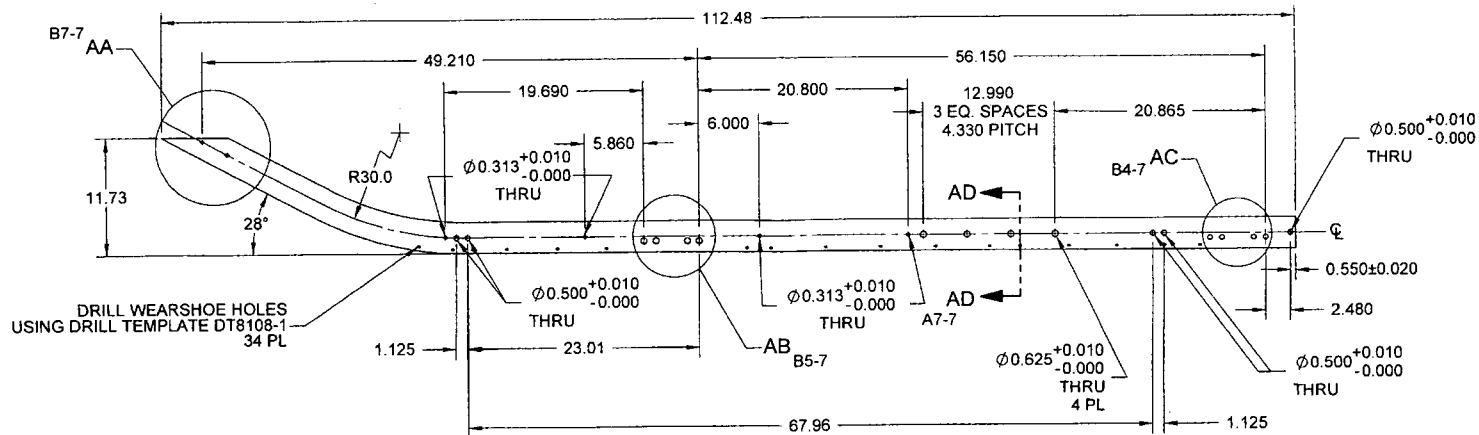
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**D2750-3 LH SKIDTUBE****DETAIL S**
SCALE 2X**DETAIL T**
SCALE 2X**DETAIL U**
SCALE 2X**SECTION V-V**
SCALE 3X, 17 PL**SECTION W-W**
SCALE 3X, 4 PL**SECTION X-X**
SCALE 3X, 4 PL

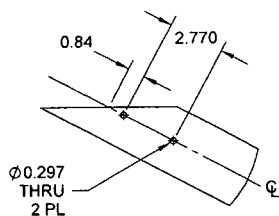
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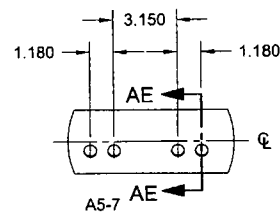
DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 6 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	
DATE	08.07.16	NTS	
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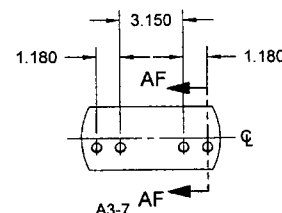
D2750-4 RH SKIDTUBE



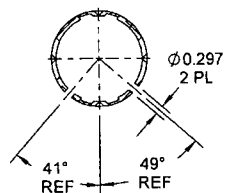
DETAIL AA
SCALE 2X



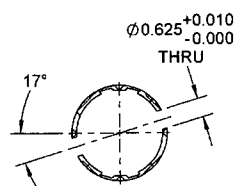
DETAIL AB
SCALE 2X



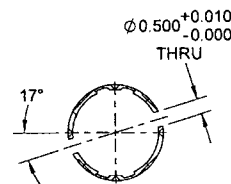
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL

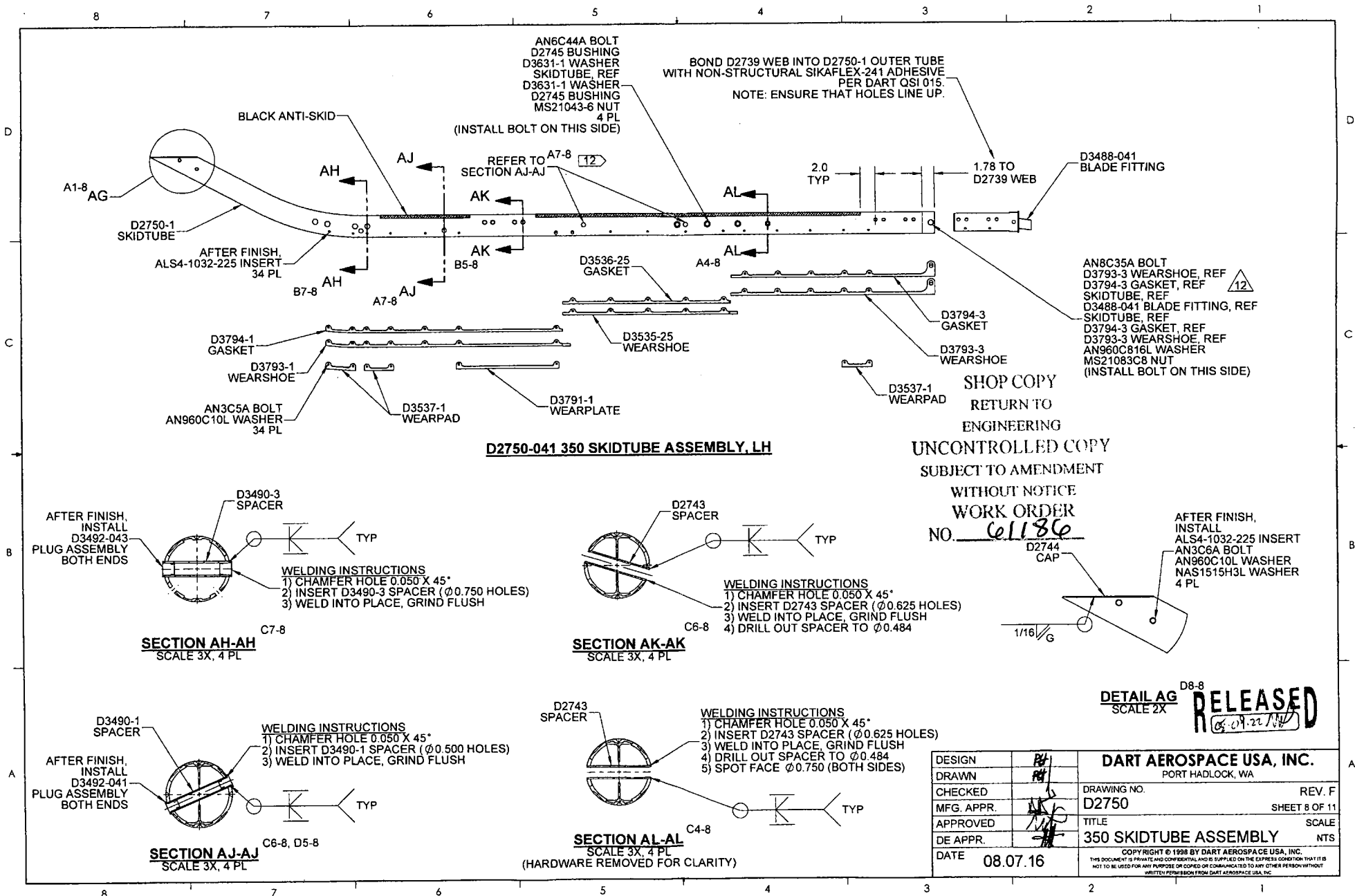


SECTION AF-AF
SCALE 3X, 4 PL

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MFG. APPR.	RA	SHEET 7 OF 11	
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DE APPR.	RA	350 SKIDTUBE ASSEMBLY	NTS
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8

7

6

5

4

3

2

1

A1-9
AMD2750-2
SKIDTUBEAFTER FINISH,
ALS4-1032-225 INSERT
34 PL

BLACK ANTI-SKID

AN

AP

AQ

AR

2.0
TYP1.78 TO
D2739 WEBD3488-042
BLADE FITTING

B7-9

A7-9

B5-9

A5-9

D3536-25
GASKETD3535-25
WEARSHOED3794-1
GASKETD3793-1
WEARSHOEAN3C5A BOLT
AN960C10L WASHER
34 PLD3537-1
WEARPADD3791-1
WEARPLATED3793-1
WEARSHOED3537-1
WEARPAD

AN8C35A BOLT
D3793-3 WEARSHOE, REF
D3794-3 GASKET, REF
D3488-042 BLADE FITTING, REF
D3794-3 GASKET, REF
D3793-3 WEARSHOE, REF
AN960C816L WASHER
MS21083C8 NUT
(INSTALL NUT ON THIS SIDE)

D2750-042 350 SKIDTUBE ASSEMBLY, RH

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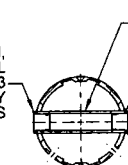
AFTER FINISH,
INSTALL
ALS4-1032-225 INSERT
AN3C6A BOLT
AN960C10L WASHER
NAS1515H3L WASHER
4 PL

RELEASED
08-09-22-10

D8-9

DETAIL AM
SCALE 2X

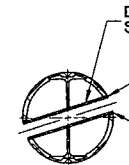
AFTER FINISH,
INSTALL
D3492-043
PLUG ASSEMBLY
BOTH ENDS



SECTION AN-AN
SCALE 3X, 4 PL

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-3 SPACER (Ø0.750 HOLES)
3) WELD INTO PLACE, GRIND FLUSH

C7-9

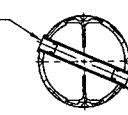


SECTION AQ-AQ
SCALE 3X, 4 PL

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (Ø0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO Ø0.484

C5-9

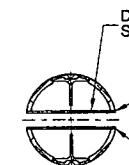
AFTER FINISH,
INSTALL
D3492-041
PLUG ASSEMBLY
BOTH ENDS



SECTION AP-AP
SCALE 3X, 4 PL

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-1 SPACER (Ø0.500 HOLES)
3) WELD INTO PLACE, GRIND FLUSH

C6-9, D5-9



SECTION AR-AR
SCALE 3X, 4 PL

(HARDWARE REMOVED FOR CLARITY)

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (Ø0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO Ø0.484
5) SPOT FACE Ø0.750 (BOTH SIDES)

C4-9

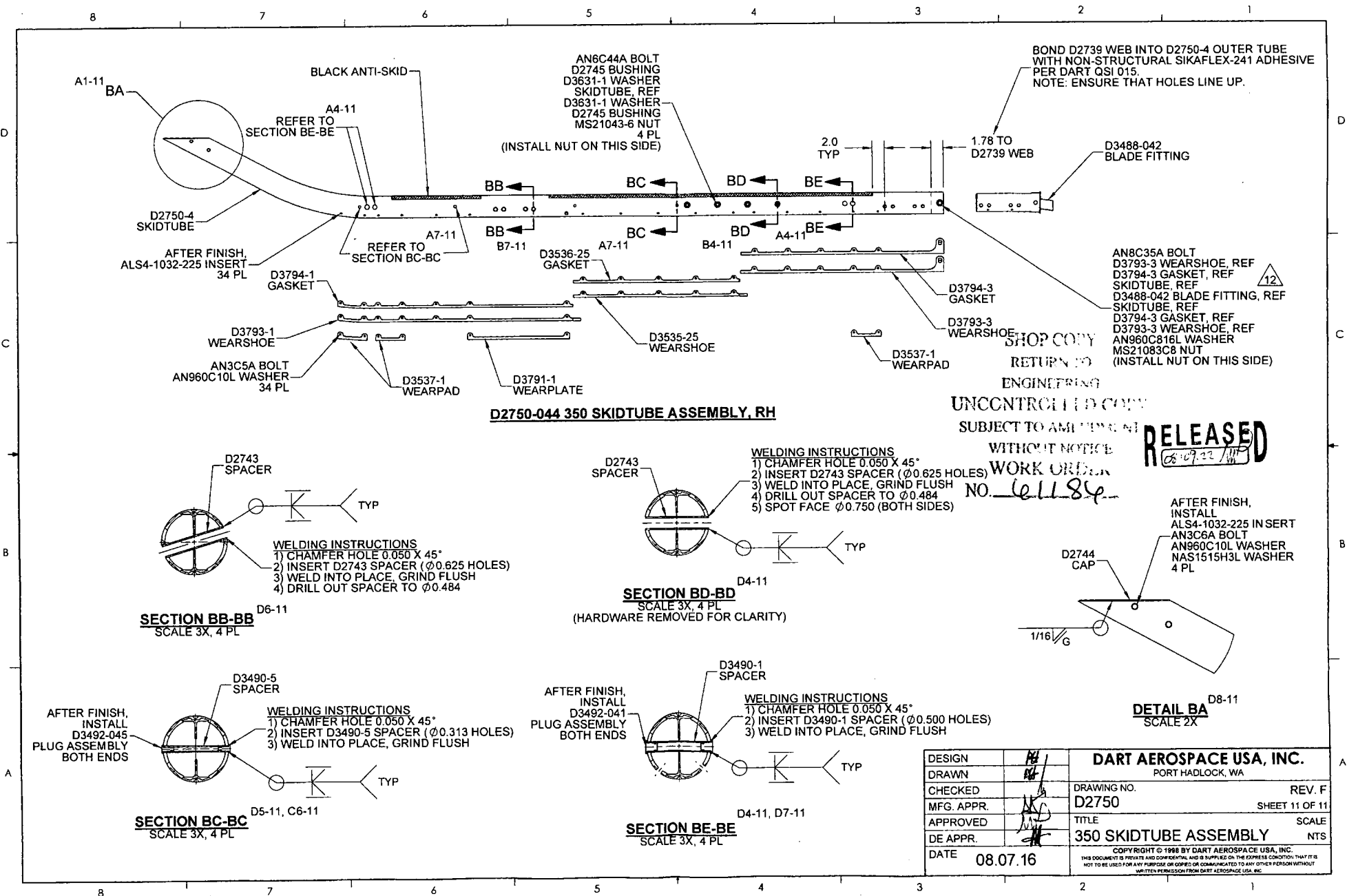
DESIGN	PU
DRAWN	PU
CHECKED	MD
MFG. APPR.	MD
APPROVED	MD
DE APPR.	MD
DATE	08.07.16

DART AEROSPACE USA, INC.

PORT HADLOCK, WA

DRAWING NO.
D2750
SHEET 9 OF 11
TITLE
350 SKIDTUBE ASSEMBLY
SCALE
NTS

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NO. 236

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Berday Elliott
Job number: 60988
Part number: D350-626-012
Description: 350 skid tube
Welding Process: Tig[☒] Mig[☐]
Base materiel: Aluminium
Current: AC[☒] DC[☐]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[☐]
Penetration: pass[☒] fail[☐]

UNACCEPTABLE

Cracks: pass[☒] fail[☐]
Undercut: pass[☒] fail[☐]
Pin holes: pass[☒] fail[☐]
Overlap (cold lap): pass[☒] fail[☐]
Porosity (surface): pass[☒] fail[☐]
Coloration: pass[☒] fail[☐]

Qualifier [Signature] Date of Test Coupon 10-08-12

Welder [Signature] Date of Test Coupon 10-08-12

The above named individual is qualified in accordance with AWS D17.1.2001 to weld